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## Patent Abstracts of Japan

PUBLICATION NUMBER : 55158146  
PUBLICATION DATE : 09-12-80

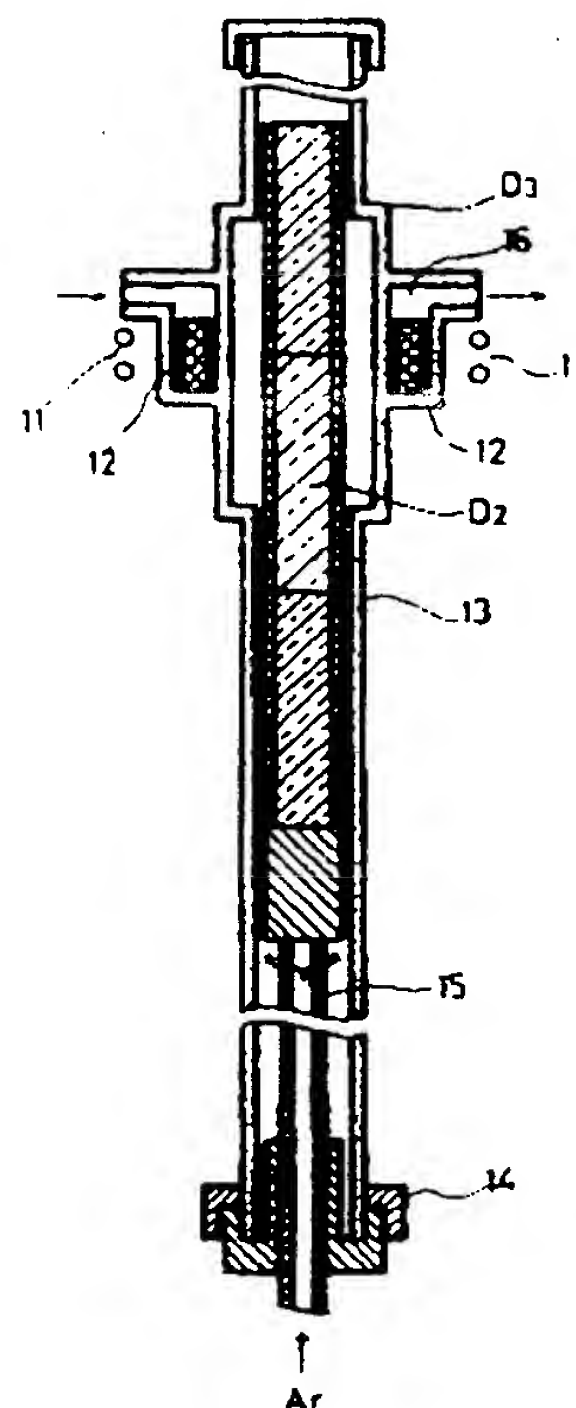
APPLICATION DATE : 29-05-79  
APPLICATION NUMBER : 54067199

APPLICANT : FUJITSU LTD;

INVENTOR : OZEKI TOMOMASA;

INT.CL. : C03B 37/025 // G02B 5/14

TITLE : MANUFACTURE OF OPTICAL FIBER



ABSTRACT : PURPOSE: To manufacture an optical fiber having different refractive index distributions in the longitudinal direction by connecting a plurality of preform rods having different refractive index distributions in a body on the same axis in the longitudinal direction followed by heating from one end and continuous spinning.

CONSTITUTION: Preform rod  $D_2$  with cut ends mirror-polished is set in fusion connecting pipe 13 with preform position regulating section 14 so that one cut end is located at the center of carbon block 12. Preform rod  $D_3$  different from rod  $D_2$  in refractive index distribution is coaxially set on rod  $D_2$ , and by applying high frequency power to high frequency induction coil 11 in an atmosphere of inert gas introduced through driving shaft 15 of section 14, block 12 is heated to a high temp. to fusion-connect rods  $D_2$ ,  $D_3$ . Connected rod  $D_2$ ,  $D_3$  is lowered with section 14, and the next rod is similarly connected to form a connected rod of the necessary length. This rod is taken out of pipe 13, heated from one end in an optical fiber spinning device, and spun at a predetermined drawing speed.

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